

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
08/991,113	12/16/1997	ALGIRDAS A. UNDERYS	FINKL-183-US	2118	
75	08/05/2002				
JAMES G. STAPLES ESQ			EXAMINER		
A. FINKL & SONS CO 2011 NORTH SOUTH PPORT AVENUE			WYSZOMIERSKI, GEORGE P		
CHICAGO, IL	60614		ART UNIT	PAPER NUMBER	
			1742	25	
			DATE MAILED: 08/05/2002	DATE MAILED: 08/05/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	08/991,113	UNDERYS, ALGIRDAS A.				
Office Action Summary	Examiner	Art Unit				
	George P Wyszomierski	1742				
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a replaced in the second of the s	136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e. cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on	·					
•	his action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) $\boxtimes$ Claim(s) <u>4,6-17 and 19</u> is/are pending in the	application.					
4a) Of the above claim(s) <u>10-14</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>4,6-9,15-17 and 19</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) ☐ Claim(s) are subject to restriction and/ Application Papers	or election requirement.					
9) The specification is objected to by the Examin	er.					
10) ☐ The drawing(s) filed on is/are: a) ☐ acce	epted or b)⊡ objected to by the Exa	miner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by the E	xaminer.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documer	its have been received.					
2. Certified copies of the priority documer	nts have been received in Applicat	ion No				
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
	·					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)	<b>△□</b> •••••••	or (DTO 442) Papar No(a)				
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s)</li> </ol>	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				
S. Patent and Trademark Office						

Page 2

Application/Control Number: 08/991,113

Art Unit: 1742 \

1. The present action is consistent with alternative number 1 as set forth on page 5 of the Board Decision mailed July 18, 2002 (Paper no. 24). The amendment filed by Fax on March 4, 2002 has been entered.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 6, 7, 15, and 16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,398,885.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both the '885 claims and the present claims are drawn to methods for treating tool steel blocks by placing same in a mounting apparatus subjected to the effects of infrared radiation, preferably from a tungsten halogen lamp (see '885 claim 6), and in an ambient atmosphere (see the "subjecting" step of '885 claim 1). The '885 claims recite a number of limitations which are not recited in the instant claims. However, none of these limitations are inconsistent with the presently claimed process, and it appears that carrying out any process as defined in the '885 claims would necessarily produce a result in which one also carries out the

Application/Control Number: 08/991,113 Page 3

Art Unit: 1742

process as defined by the present claims. Consequently, no patentable distinction is seen between the presently claimed process and that of the '885 patent.

- 4. Claim 4 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,398,885 in view of either McGinty (U.S. Patent 4,540,876) or Heath (U.S. Patent 4,620,884). The claims of the '85 patent do not recite the reflective surface as recited in instant claim 4. Both McGinty and Heath indicate that it was well-known in the art at the time of the invention to employ reflective surfaces in infrared treatment furnaces; see McGinty claim 1, lines 2-4 or Heath column 4, lines 1-5. These disclosures would have rendered it obvious to one of ordinary skill in the art to utilize the presently claimed reflective surfaces when performing the process according to the '885 claims.
- 5. Claims 8 and 9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,398,885 in view of Heath. The '885 claims recite the use of an ambient atmosphere, as opposed to the "non-air" or "vacuum" environment as recited in instant claims 8 and 9, respectively. Heath column 1, lines 29-45 discuss the problems which arise in heat treating furnaces due to oxidation and other effects of oxygen at high temperatures in the furnace. Based upon this disclosure, it would have been an obvious expedient for one of ordinary skill in the art to substitute an inert atmosphere in the heat treating process of '885 for the ambient atmosphere as recited in the '885 claims.

Page 4

Application/Control Number: 08/991,113

**Art Unit: 1742** 

- 6. Claim 17 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,398,885 in view of any of Fielding et al. (U.S. Patent 4,221,956), Erikson et al. (U.S. Patent 4,224,504), Crossley et al. (U.S. Patent 4,868,371), or Westerberg et al. (U.S. Patent 6,013,900). The '885 claims do not recite the maximum temperature as recited in instant claim 17. The examiner's position is that it is obvious in a heat treating process that the maximum temperature which can be achieved is the temperature of the actual heat source. In the case of infrared heat treatment using a tungsten halogen lamp (as done in '885 and the presently claimed process), that temperature would be approximately that as presently claimed, as evidenced by Fielding column 4, lines 5-10, Erikson column 4, lines 6-11, Crossley claim 1, step (a), or Westerberg column 3, line 63 to column 4, line 4. In this respect, the examiner notes that 5000°F is approximately equal to 2750°C or 3025 K. Given the general knowledge of tungsten halogen lamp temperatures as recited in the secondary references, one of ordinary skill in the art would conclude that the temperature recited in instant claim 17 would approximate the maximum temperature achievable in the '885 process.
- 7. Claim 19 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,398,885 in view of McGinty. The '885 claims define a process which includes heat treating a tool steel workpiece by the effects of a source of infrared energy, but do not recite the specific reflective material as set forth in the instant claim. McGinty column 3, lines 36-38 indicate that it was conventional in the art at the time of the invention to employ gold plated reflective walls in infrared heat treatment processes. Consequently, to use such a surface in the process as defined by the '885 claims would have been considered an obvious expedient by one of ordinary skill in the art.

Page 5

Application/Control Number: 08/991,113

Art Unit: 1742

- 8. The remainder of the art cited on the enclosed PTO-892 form is of interest. This art is held to be no more relevant to the claimed invention than the art as applied in the rejections, supra.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (703) 308-2531. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (703) 308-1146. The fax phone number for this Group is (703) 872-9310. The Right fax number for this examiner is (703) 872-9039. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

GEORGE WYSZOMIERSKI PRIMARY EXAMINER

GPW August 1, 2002